



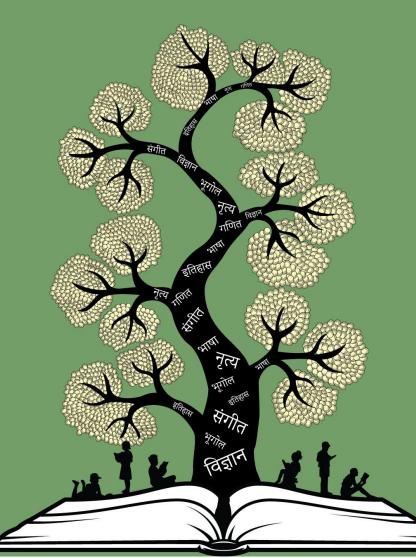




Sacrical शिक्षकों द्वारा कला समेकित शैक्षिक विधियाँ Art Integrated Pedagogical Practices by Teachers

2024-25





Teachers' Project Proposals

Teachers' Project Proposals

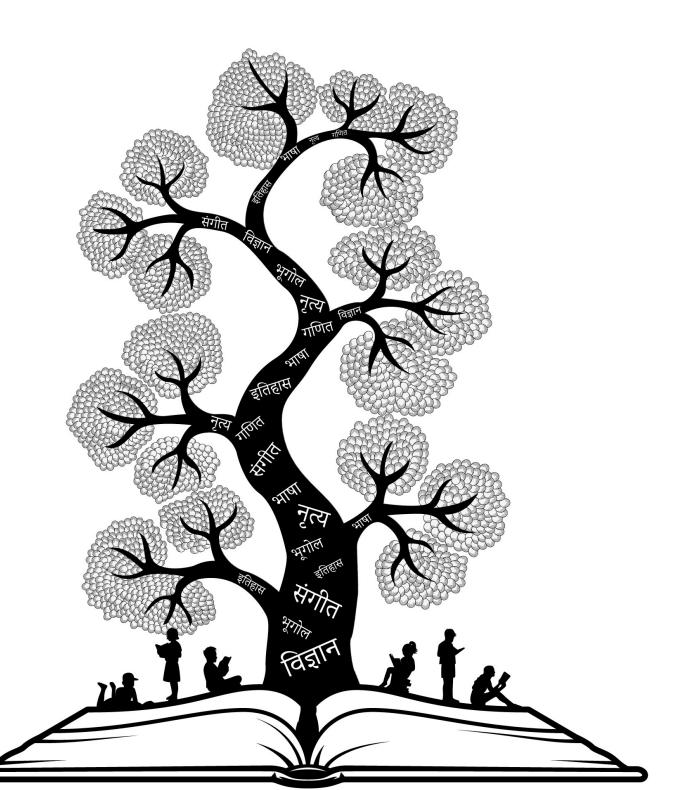


Table of Contents

| 1. Andaman & Nicobar Islands1 |
|--|
| 2. Andhra Pradesh5 |
| 3. Assam |
| 4. Bihar11 |
| 5. Chandigarh18 |
| 6. Goa21 |
| 7. Gujarat |
| 8. Haryana |
| 9. Himachal Pradesh32 |
| 10. Jammu & Kashmir34 |
| 11. Jharkhand |
| 12. Maharashtra41 |
| 13. Mizoram45 |
| 14. Nagaland47 |
| 15. Odisha49 |
| 16. Rajasthan51 |
| 17. Sikkim |
| 18. Uttar Pradesh55 |
| 19. Kendriya Vidyalaya Sangathan59 |
| 20. Jawahar Navodaya Vidyalaya Samiti63 |
| 21. Daman & Diu and Dadra & Nagar Haveli67 |

Andaman & Nicobar Islands – Subject Teacher

Name of the subject Teacher: Shilpi Bhattacharya

Subject: Science

1. Area/ Theme: Structure of Atom (Bhor's Model of an Atom)

2. Curricular Goals:

- 2.1 Curricular Goal- 1
 - Explores the world of matter, its interactions and properties at the atomic level.

3. Mapping of Competencies:

3.1 Competency 1.1

• Describes classification of elements in the periodic table and explains how compounds are formed based on atomic structure (Bohr's model) and properties (valency).

4. Learning Outcomes:

SC0901- Differentiates materials and elements.

SC0907- Draws labeled diagrams to show distribution of electrons in different orbits in an atom.

SC0909 -Uses scientific conventions and symbols.

5. Use of different components of arts for the comprehension of the concept:

- 5.1 Weaving art
- 5.2 Theatre and song
- 5.3 Indigenous interactive hopscotch
- 5.4 coconut shell handicraft
- 5.5 Weaving art to make placard.

6. Resources Used:

- 6.1 Coconut leaf
- 6.2 Coconut leaf mat
- 6.3 Coconut shell handicraft

7. Assessment:

7.1 Weaving Activity Assessment:

- Observation checklist to check if the students can articulate how atoms combine to form elements during activity.
- 7.2 Drama activity Assessment:
 - Creativity and engagement in their roles will be assessed through oral quiz and performance.
- 7.3 Indigenous interactive hopscotch Assessment:
 - Quiz or short test to check knowledge of symbols and names of elements.

- Short test to check labeling of Bhor's model of an atom.
- **8.** Follow-up Activity: Explanation by the teacher to students for better understanding. Providing students opportunity in more hands-on activity to learn the names of elements.

9. Reflection:

- 9.1 Atoms are the building blocks of matter.
- 9.2 Elements are classified and identified using symbols and atomic numbers.
- **9.3** Bhor's model of an atom.
- 9.4 Energy levels in atoms can be visualized through interactive games.
- **9.5** Encourage students to reflect on what they learned through discussions and ask questions for clarification.
- 10. Processes and Strategies: Teaching Atomic Structure Using Art integrated pedagogy

10.1 LEARNING OBJECTIVES:

- By the end of this session, students will be able to:
- Differentiate between atoms and elements (SC0901).
- Draws labeled diagrams of distribution of electrons in different orbits in an atom (SC0907).
- Uses scientific conventions and symbols (SC0909).

10.1.1 WEAVING: THE HIDDEN ART

- Introduction to Atoms and Elements
- Learning Outcome: Students will differentiate between atoms and elements and understand that atoms are the building blocks of matter.
- The session begins by explaining that "an atom is the smallest component of an element." using the weaving technique as a hands-on activity to make the concept tangible.
- Each strand in the weave represents individual atoms.
- The final woven mat represents an element, emphasizing that atoms come together to form elements.

10.1.2 DRAMA

- Classifying Elements Using Scientific Conventions
- Learning Outcome: Students will classify materials as elements and associate them with their symbols, names and atomic numbers.
- Names of elements (from 1 to 18) to the woven mats created.
- Each woven mat represents an atom displaying the symbols and atomic numbers of elements.
- Organizing such drama, where students personify elements to demonstrate their properties fosters memory.

10.1.3 THE ELEMENT SONG:

- Learning Outcome: Students will memorize the names of the first 18 elements in the periodic table.
- Introduction of an "element song" to help students memorize the names and order of elements.
- "Hydrogen and Helium
- Lithium, Beryllium,
- Boron, Carbon are my friend. Nitrogen to be everywhere Oxygen to make us breathe,
- Fluorine for our beauty teeth,
- Neon to fill up the lights,
- Sodium for salty snacks. Magnesium...... Aluminium. Silicon, Phosphorus......
- Sulphur, Chlorine and Argon."
- Encouraging students with creative expressions to make learning interactive and enjoyable is essential. (Slight overview of
- **10.1.4** Exploring the Development of Atomic Models Learning Outcome: Students will describe the progression of atomic models and their significance.)

10.1.5 Aao khele khel.... KHAMBA KHEL (Indigenous interactive hopscotch)

- Understanding Energy Levels through Khamba Khel
- Learning Outcome: Students will visualize energy levels
- (K shell -2 electrons, L shell-8 electrons and M shell -8 electrons)
- and understand how electrons occupy shells in an atom.
- Introduce Khamba Khel, a version of hopscotch, to teach energy levels:
- Each step in the hopscotch concentric circles represents an energy level or shell.
- Students fill these shells with coconut shell (representing electrons), simulating how electrons occupy different energy levels and concept of Valency (It is the number of electrons an atom needs to gain, lose or share to achieve a stable electronic configuration (usually a full outer shell) becomes very clear.
- Relating this activity to Bohr's model to visualize and make the concept practical and engaging is again a crucial step.

CONCLUSION:

This structured and interactive pedagogical approach ensures that students not only understand scientific concepts but also enjoy the process of learning through creative techniques like weaving, drama, music, and indigenous games. These methods foster curiosity, improve retention, and build a solid foundation in atomic Structure.







Andhra Pradesh – Subject Teacher

Name of the subject Teacher: Baddigam Rama Lakshmi

Subject: English

- 1. Area/ Theme: Poetry-'Fog'(poem)-X class
- **2.** Curricular Goals: Students learn to appreciate the beauty and style of the poem. Learn to sing in a poetic way and act accordingly. Understand poets thought beyond the words.
- **3. Mapping of Competencies:** Singing the poem aloud with action. knowing the theme of the poem. pay attention to the rhythm. Finding the human values of the poem and poet thought beyond the poem.
- 4. Learning Outcomes: Students learn that the worst ordinary aspects of nature can be beautiful. learn to think beyond the words of the poem. try to learn humanity and express it in any form including in subjects.
- 5. Use of different components of arts for the comprehension of the concept: Singing the poem, dancing/acting according to the poem, paintings related to the topic, demonstration of artificial fog by dry ice, role play.
- **6. Resources Used:** Blackboard/ifb/green board/projector, traditional toys of 'Etikoppaaka', hand made cat mask, white chutney, printed materials for students workout
- 7. Assessment: Asking questions to the students "oral interaction"
- **8.** Follow-up Activity: Use any art form to exhibit fog poem in your own way. prepare any (art integrated) article related to the poem
- **9. Reflection:** Oral activity/interactions with students: Did you enjoy the poem? Did you understand the theme? 'Fog' in your own words
- 10. Processes and Strategies: Introduction of the poem -showing a drawing, asks the students what can you see in the picture? Can you see the trees clearly? Why? Yes, the place is covered with fog. announcement of the name of the peom- today we are going to learn a small poem 'fog' written by "carl sandburg". singing of the peom 'fog' sings the poem with correct pause intonation, pronunciation musically.





Andhra Pradesh – Art Teacher

Name of the subject Teacher: Bailapudi. Laxman Murthy

Subject: Drawing

- 1. Area/ Theme: Poetry -'fog'(poem)-X class
- 2. Curricular Goals: Learn to observe the beauty of nature, try to learn any art form by observing the art pieces of teacher, develop art integration in subjects by practice
- **3. Mapping of Competencies:** Understanding the importance of Rt in learning english poem, practice any art form and incorporate it in subjects, e: singing, acting, drawing, preparing traditional arts using local low cost- no cost material
- **4. Learning Outcomes:** Observe nature and compare with other suitable things, try to develop interest in art forms, try to incorporate art forms in education
- **5.** Use of different components of arts for the comprehension of the concept: Demonstrate artificial fog, usage of indigenous toys, handicrafts to visualize the poem
- 6. Resources Used: Drawing of foggy atmosphere, dry ice to prepare fog, painting of different situations of foggy atmosphere (girl and an old woman, mothers love, children care towards parents
- 7. Assessment: By showing /displaying the art pieces, models, masks.
- 8. Follow-up Activity: TLM exhibits to students to get an idea of art forms and to select their interested one
- 9. Reflection: Develop art for better life
- **10. Processes and Strategies:** Introduction of the poem- helps show pictures to students, announcement of the poem keep dry ice in a bowl and prepare fog, distribute papers of the poem, display the handicraft traditional toys and models with dry ice , fog provides necessary material to teacher, distribute question papers, students observe and experience fog in classroom observes, listens carefully, enjoys singing and understands words of unknown words , helps the students where they feel difficult to answer, ICT and traditional method of TLM are prepared teacher helps wherever necessary





Assam – Subject Teacher

Name of the subject Teacher: Mrinal Bhagabati

Subject: Science, sound chapter of class nine

- 1. Area/ Theme: Origination, propagation and characteristics of sound
- 2. Curricular Goals: Understanding concepts related to sound through activities and to nurture curiosity, aesthetic sense and creativity
- **3. Mapping of Competencies:** Enables students to generate new knowledge by engaging with the information passed on to them
- **4. Learning Outcomes:** To link children's life at school to their life outside the school. To discourage rote learning.
- **5.** Use of different components of arts for the comprehension of the concept: Instruments used in Bihu dance and toys
- 6. Resources Used: Musical instruments like pepa, gogona, TLM prepared from trash and leaf
- 7. Assessment: Students will understand the topic
- 8. Follow-up Activity: Endeavour will be made to integrate art while teaching science
- 9. Reflection: Integration of art forms make learning joyful
- **10. Processes and Strategies:** Emphasis will be on hands on activities, observation, study the daily life experiences etc. To make learning joyful art integrated pedagogical practices will be adopted. Multi disciplinary approach will be followed.





Bihar - Subject Teacher

Name of the subject Teacher: Manish Kumar Pandey

Subject: Maths & English

1. Area/ Theme: The central theme of the play is the struggle for women's identity and social justice. It high lights how societal norms often restrict a woman' sidentitytoher relationships, while every woman has a unique individuality that deserves recognition.

2. Curricular Goals:

- To foster critical thinking and a deeper understanding of social issues among students.
- To encourage creativity and communication skills through artistic expression.
- To instill awareness about gender equality and social justice.

3. Mapping of Competencies:

- Critical Thinking: The students will develop the ability to identify and question societal stereo types.
- Communication Skills: The performance will enhance their dialogue delivery and expression.
- Collaboration: Working together in a team fosters a spirit of cooperation.

4. Learning Outcomes:

- Students will understand the importance of women's identity beyond traditional societal norms.
- They will become more aware of gender equality and social justice. The integration of art and education will nurture their creativity and broaden their perspectives.

5. Use of different components of arts for the comprehension of the concept:

- We have incorporated various art forms to make this drama impactful: Visual Arts: Set design, costumes, and lighting.
- Theatre: Acting, dialogue delivery, and expressions.
- Music: Background score to enhance the emotional depth of the scenes.

6. Resources Used:

- Textbook: The chapter Dharm Yuddh from the Class 9 curriculum.
- Props: Traditional costumes, books, and household d items for authenticity. Technical Support: Music and lighting arrangements.

7. Assessment:

- Students were assessed on their acting skills, dialogue delivery, and emotional expressions. Their understanding of social issues was evaluated through
- Discussions after the rehearsals.

8. Follow-up Activity:

After the performance, students participate dinessay writing and group discussions to share their reflections.

A poster-making activity on Women Empowerment was also organized.

9. Reflection:

- This drama was a learning our ney for all of us.
- The students not only expressed themselves through acting butal soga ineda deeper understanding of societal issues.
- Itreinforcedtheimportanceofintegratingartandeducationtomakelearning
- More effective and enjoyable
- **10. Processes and Strategies:** Art Integrated Learning (AIL) is an innovative approach that integrates art into the teaching-learning process to make education more engaging, meaningful, and Impactful. This method encourages active participation, critical thinking, and creativity among students while fostering a deeper understanding of the subject matter. Below, I outline the detailed process and strategies employed to teach Chapter 1 from the Class 9 English textbook using AIL.

10.1. Lesson Introduction

The process began with a clear introduction to the lesson, emphasizing it score themes, such as gender inequality and personal identity. The students were Provided with an over view of the story, focusing on its key characters, their struggles, and the societal norms they encounter. To make the discussion interactive, I asked students reflective questions like: What do you think defines a person's identity? Have you observed any instances of gender in equality a round you? This step helps edin building curiosity and setting that one for the lesson.

10.2 Role Play Activity

The next step involved assigning roles to students for a role play based on the chapter. The roles were distributed considering each student's comfort and abilities. Students were given time to prepare dialogues and rehearse their parts under my guidance. During the preparation phase, I encouraged them to think about the emotions, motivations, and challenges of their characters to bring authenticity to their performance.

The role play was performed on stage, allowing students to bring the chapter to life. This activity enhanced their understanding of the lesson's message while improving their communication, team work, and confidence. Role play also Allowed the students to empathize with the character sand relate to their al-life challenges depicted in the story.

10.3 Discussion on Key Themes

After the role play, we conduct edan open discussion on gender in equality, one of the central themes of the chapter. Students shared their personal experiences and observations about how gender discrimination affects individuals and society. This discussion encouraged critical thinking and provided a platform for students to voice their opinions and ideas for change.

10.4 Art and Creativity Integration

To reinforce the lesson, students were asked to express their understanding Through paintings and posters. The theme for the artwork was gender equality and women's empowerment. Students used vibrant colors and creative designs to depict the importance of equal opportunities for all genders. This activity allowed them to connect emotionally with the topic and express their thoughts visually.

10.5 Assessment and Reflection

To assess the learning outcomes, I observed students' participation during the Role play, their contributions to the discussion, and the creativity in their art work. Feedback was provided to each student, appreciating their efforts and guiding them for improvement. Finally, are flections activity was conducted where students shared their take always from the lesson? They discussed how the chapter and the activities had Influenced their perspective song endure quality and inspired them to take small steps toward creating a fairer society.

10.6 Conclusion

This process of teaching through Art Integrated Learning not only enhanced students' academic understanding but also nurtured critical life skills like empathy, creativity, and problem-solving. By integrating art with education, the students were able to engage deeply with the lesson and connect it to real-life issues, making the learning experience truly transformative.



| | 6 |
|----------|---|
| Padma : | How am I different from others? |
| Maa : | You are my daughter, our only child and your father's darling. |
| Padma : | Father cares more for money than for me. It takes a heart to bestow love. |
| Maa : | For whom does he save? He does all this only for your sake. You shouldn't think that I've no heart. |
| Padma : | But I didn't say it of you. |
| Maa : | I am not in any way different from him. My identity is linked with his and I cherish the bond. (Enters Padma's father) |
| Father : | What is this talk about the bond, Padma's mother? |
| Maa : | Here is your father. Ask him whatever you want to know. |
| Father : | What's it, my child? |
| Maa : | She wants to know what is the identity of a woman. |
| Father : | You will know it, dear, when you are married. |
| Padma : | Does marriage lend identity to a woman? |
| Maa : | What is a woman without a husband? |
| Padma : | What if one does not get married? |
| Maa : | Why do you always ask such senseless questions? |
| Padma : | What about a woman whose husband is dead? |
| Maa : | Life is hell for her. |
| Padma: | That's injustice! |
| Maa : | You needn't talk of justice and injustice here. |
| Padma : | Why? |
| Maa : | Over here women don't have the right to ask questions. |
| Padma : | What right do they have then? |
| Father : | Rights are for equals, dear. |
| Padma : | Why is a home considered a place for bargaining? One shouldn't live in such a place. |
| Father: | You will get the same replies to these questions wherever you go. |
| Padma : | But the identity of a woman is the identity of the human race. A society sans women |
| Father : | That's why they say that marriage lends this identity. |
| Padma : | So if a girl does not get married she has no identity! Why is it that an unmarried man is venerated and called a saint while an unmarried woman is called immoral and wanton? |



Bihar – Art Teacher

Name of the subject Teacher: Noopur Chakroborty

Subject: Art Teacher

1. Area/ Theme: The central theme of the play is the struggle for women's identity and social justice. It highlights how societal norms often restrict a woman's identity to her relationships, whereas every woman has a unique individuality that deserves recognition.

2. Curricular Goals:

- To foster critical thinking and a deeper understanding of social issues among students.
- To encourage creativity and communication skills through artistic expression.
- To instill awareness about gender equality and social justice.

3. Mapping of Competencies:

- Critical Thinking: The students will develop the ability to identify and question societal stereo types.
- Communication Skills: The performance will enhance their dialogue delivery and expression.
- Collaboration: Working together in a team fosters a spirit of cooperation.

4. Learning Outcomes:

- Students will understand the importance of women's identity beyond traditional societal norms.
- They will become more aware of gender equality and social justice. The integration of art and education will nurture their creativity and broaden their perspectives.

5. Use of different components of arts for the comprehension of the concept:

- We have incorporated various art forms to make this drama impactful: Visual Arts: Set design, costumes, and lighting.
- Theatre: Acting, dialogue delivery, and expressions.
- Music: Background score to enhance the emotional depth of the scenes.

6. Resources Used:

- Textbook: The chapter *Dharm Yuddh* from the Class 9 curriculum.
- Props: Traditional costumes, books, and household items for authenticity.
- Technical Support: Music and lighting arrangements.
- 7. Assessment: Students were assessed on their acting skills, dialogue delivery, and emotional expressions. Their understanding of social issues was evaluated through discussions held after the rehearsals.

8. Follow-up Activity:

After the performance, students participate dinessay writing and group discussions to share their reflections. A poster-making activity on Women Empowerment was also organized.

9. Reflection:

- This drama was a learning journey for all of us.
- The students not only expressed themselves through acting but also gained a deeper understanding of societal issues.
- It reinforced the importance of integrating art and education to make learning more effective and enjoyable.
- **10. Processes and Strategies:** Art Integrated Learning (AIL) is an innovative approach that integrates art into the teaching-learning process to make education more engaging, meaningful, and impactful. This method encourages active participation, critical thinking, and creativity among students while fostering a deeper understanding of the subject matter.

Below, I outline the detailed process and strategies employed to teach Chapter 1 from the Class 9 English textbook using AIL.

10.1 Lesson Introduction:

The process began with a clear introduction to the lesson, emphasizing its core themes, such as gender inequality and personal identity. Students were provided with an overview of the story, focusing on its key characters, their struggles, and the societal norms they encounter.

To make the discussion interactive, I asked students reflective questions like:

What do you think defines a person's identity? Have you observed any instances of gender inequality around you? This step helped in building curiosity and setting the tone for the lesson.

10.2 Role Play Activity:

The next step involved assigning roles to students for a role play based on the chapter. The roles were distributed considering each student's comfort and abilities. Students were given time to prepare dialogues and rehearse their parts under my guidance.

During the preparation phase, I encouraged them to think about the emotions, motivations, and challenges of their characters to bring authenticity to their performance. The role play was performed on stage, allowing students to bring the chapter to life. This activity enhanced their understanding of the lesson's message while improving their communication, teamwork, and confidence.

Role play also allowed students to empathize with the characters and relate to the real-life challenges depicted in the story.

10.3 Discussion on Key Themes:

After the role play, we conducted an open discussion on gender inequality, one of the central themes of the chapter. Students shared their personal experiences and observations about how gender discrimination affects individuals and society.

This discussion encouraged critical thinking and provided a platform for students to voice their opinions and ideas for change.

10.4 Art and Creativity Integration:

To reinforce the lesson, students were asked to express their understanding through paintings and posters. The theme for the artwork was gender equality and women's empowerment.

Students used vibrant colors and creative designs to depict the importance of equal opportunities for all genders. This activity allowed them to connect emotionally with the topic and express their thoughts visually.

10.5 Assessment and Reflection

To assess the learning outcomes, I observed students' participation during the role play, their contributions to the discussion, and the creativity in their artwork. Feedback was provided to each student, appreciating their efforts and guiding them for improvement.

Finally, a reflection activity was conducted where students shared their key takeaways from the lesson. They discussed how the chapter and the activities had influenced their perspectives on gender equality and inspired them to take small steps toward creating a fairer society.

10.6 Conclusion

This process of teaching through Art Integrated Learning not only enhanced students' academic understanding but also nurtured critical life skills like empathy, creativity, and problem-solving. By integrating art with education, students were able to engage deeply with the lesson and connect it to real-life issues, making the learning experience truly transformative.



Chandigarh - Subject Teacher

Name of the subject Teacher: Ritu Mahajan

Subject: Science

- 1. Area/ Theme: Life Sciences (Circulatory System in Humans)
- 2. Curricular Goals: To: Foster Critical Thinking Prepare students for higher education and vocational careers in medical sciences Forward joyful, experiential and holistic learning
- 3. Mapping of Competencies: To develop:
 - Creative thinking
 - Observation skills
 - Communication skills
 - Decision making skills
 - Self care and awareness on good health and wellbeing
- 4. Learning Outcomes: Explain size and structure of the heart. Draw and label heart structure and circulatory pathways. Measure pulse rate. Suggest healthy heart habits.
- 5. Use of different components of arts for the comprehension of the concept: Visual, performing(music) and digital art integrated with the use of technology. Use of Mnemonics.
- **6. Resources Used:** Some stationary items, used syringes, a musical instrument like Tambourine, mobile phone and a smart board.

7. Assessment:

- Drawing and labelling of heart diagram
- Responses in notebooks
- Observation records
- Role play as different parts of the heart

8. Follow-up Activity:

- Create poems/Raps in groups covering topics like heart valves.
- Make interesting riddles answer to which is HEART.
- Measure and compare pulse rate of all your family members and include some friends also.
- Make animated videos of the topic/make a clay project showing heart structure and circulatory pathways
- **9. Reflection:** A feedback form (to be filled by the learners) is prepared by the teacher to identify the areas which need to be improved upon.

10. Processes and Strategies:

Subject: Science
Class: 10th
Theme: Life Sciences (Circulatory System in Humans)
Step1
The teacher will explain structure, shape and size of heart by using visual aids like chart, model and her fist.

Step2

Explains working of the heart by working model and heart sounds by her hands and will ask students to follow her hand actions.

Step3

The teacher will show video and simultaneously ask students to sing HEART RAP song to facilitate long term retention of the learnt material.

Step4

Teacher demonstrates as how to measure pulse rate from the wrist. She then asks the learners to measure their own.

Now she will introduce free mobile apps like: HEART RATE MONITOR; GOOGLE FIT for this purpose.

Step5 (ICEBREAKER)

Teacher starts this as a fun game. She randomly calls out roll numbers of two students at a time. These students will come running to her table. Each will be asked to pick one chit from the bowl and read out the habit written on it loudly to the class.

Student to decide for himself whether the habit written on chit is healthy for heart or not and act accordingly.

Either keep the chit with him or throw it in the dustbin.

Teacher will now summarize the ABCD of healthy heart habits.

Step6

Teacher suggests related resource material on DIKSHA PORTAL, e-Pathshala and PM evidya channel for those who want to explore more on the topic.

Suggested Activities

Make some riddles

Create some poems/rap songs covering topics like heart valves

Measure and compare pulse rate of your family members

Assessment Tools

Drawings, responses in notebooks, observation records and role play as different part of heart



Goa – Subject Teacher

Name of the subject Teacher: Sneha Shrikant Yedage

Subject: Social Science

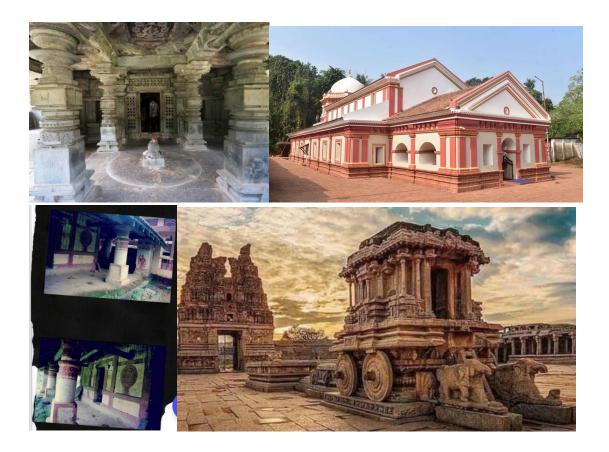
- **1.** Area/ Theme: To study the art and Architectural style during Vijayanagara dynasty. (Themes In Indian HistoryViajayanagara 14th to 16th Century)
- 2. Curricular Goals: To analyse and draw inside to understand the art, architecture culture and sacred area from the Vijayanagara empire also its style, period and it's Heritage.
- **3.** Mapping of Competencies: To identify and procure natural materials like stone amd know its importance from the Historical era, red ochre, lime, and other pigments from local sources. To understand preserving traditional knowledge about natural resources, to understand the mythological narratives and symbolism depicted through Kaavi art on temples amd sacred places.
- 4. Learning Outcomes: Students will understand historical background of art & architecture style during Vijayanagara Empire and parallelly associate with Kadamba dynasty in southern part of India including Goa. Identify approaches towards the sources of art and architecture of India and Goa through IKS. (Indian Knowledge System).
- **5.** Use of different components of arts for the comprehension of the concept: Use of finding natural resources like limestone, organic colours and pigments through geological study periodically and execute it as painting, clay modelling and stone 3d modelling etc
- 6. Resources Used: Themes in Indian History, XII, History textbook: title of the lesson "AN IMPERIAL CAPITAL VIJAYANAGARA 14th to 16th CENTURY" Discovery Goa by Morris Hall, Article son Rock art & kaavi art by Environmentalist Sir. Rajendra Kerkar. 3D model of Saptakoteshwar temple of Narve showcases unknown facets by Rajendra Kerkar. 3d miniature model done by our students of vijayanagar empires Virupaksha temple amd charriot, etc Field visit at Goa's Sacred temples and houses which has kaavi art visually displayed. Deshprabhu house from Goa and Boraskar house in Poinguinim. Articles of Savni Shetye on kaavi research.
- 7. Assessment: Assign students to identify and sources to understand art and architecture of south India and Goa during different dynasties. Provide students with images of Kaavi artworks and ask them to identify and interpret the mythological themes, symbols, and iconography. Assign students to research a specific natural resource used in Kaavi art, its cultural significance, and its impact on the environment.
- 8. Follow-up Activity: Field trip as part of historical visit and its importance and also study tour under the grants of social welfare department govt of Goa. Floral and fauna designs will reflects sociocultural & ecological perspective of the students.

- **9. Reflection:** It will help to understand your creative process, explore your artistic journey, and develop your skills, Kaavi art is a form of art which reflect the ancient era to modern era as a whole.
- 10. Processes and Strategies: Introduction was given to students on different dynasties ruled in India and its unique contribution in art, architecture and culture. Previous knowledge was taken from students regarding different sources for the study of history. Variations of Ancient and Modern art along with architectural style in different parts of South India was explained to students through group activities, discussions, and reference to textbooks and maps. With the help of these activities students will understand the Kadamba dynasty's art and architecture influenced the art and architecture of the Vijayanagara empire in several ways like hindus temples, sacred places, shrines and churches.

Model temples of Goa will give broad information on transformation phase of art and architecture of temples from Kadamba dynasty to Vijayanagara dynasty and to modern era. Each era introduced new forms, carvings, and layouts, reflecting changes in religious practices and cultural influences.

- Strategies like group discussion, videos, and examples.
- Ask students to discuss art and architecture during the Vijayanagara Empire.
- Ask students to write down key features of the art and architecture.
- Use videos to show examples of Vijayanagara Empire art and architecture
- Use examples of Vijayanagara Empire art and architecture, such as the Virupaksha Temple in Hampi.
- Use example of Kadamba dynasty and its art and architecture, such as Saptakoteshwar temple in Narvem Goa.





Goa – Art Teacher

Name of the subject Teacher: Yogesh Vishnu Kauthankar

Subject: Visual Art/ Art Education

- 1. Area/ Theme: Understand & learning the architectural style through 3dimentional Art Design and visual art Technique
- **2.** Curricular Goals: To develop, enhance, and understand the Architecture style in 3Dimensionally Also traditional art techniques used on this surfaces.
- **3. Mapping of Competencies:** To Master the skill of incising 3Darchitectural designs into a the hard mediums such as stones etc through Indian Knowledge System (IKS) To apply the traditional pigment technique to the incised lines to create a vibrant and contrasting effect. Parallel to that To prepare the wall surface by applying lime plaster and smoothing it to create a suitable base for Kaavi art.

4. Learning Outcomes:

Students will develop Traditional Skills aligned with IKS (Indian Knowledge System), Students will explore also the indigenous surface art along with its originality from sacred spaces.

- 5. Use of different components of arts for the comprehension of the concept: Exploring the type of stone designs, Architectural style, carving and art depicted on it from mythological era.
- 6. Resources Used: The An Imperial capital vijayanagara 14-16centuary, History 12th Arts text book, The Book referred called Morris Hall, Discovery of Goa, which is available at central library, Government of Goa panjim, (specifically elaborated and mentioned on the vijayanagara kingdoms architecture and the presence into the goa's region also the art forms of technique sed in "kaavi Art". Type of stones available and type of designs included indegeneous mediums

Fine red soil (tambdi Mati as known as local name), limestone, charcoal powder and a natural binding plant extract or jaggery, lady figure extract etc. Famous article published On Times of India by researcher scholar and well know Environmentalist from Goa Shri Rajendra Kerkar Sir.

7. Assessment: Learning through and activity given as practical 3D Dimensional Miniature models making by using cutting sculpting and designing using clay or stone as a medium Of vijaynagara empire temples architecture study As a entrepreneur Different activities of saree painting on same ancient kaavi art depicted, terracotta vijaynagar temple designs from temples as fabric painting by the students.

- 8. Follow-up Activity: Field visits Learning and parallel study the designs and pattern along with it, learning the process of music melody through architecture from the vijaynagar era likes melody sound from the pillars. Different activities such as saree painting, miniature temple for students to explore the kaavi art through different ways.
- **9. Reflection:** Students learn the skills of architect designing along with parallel through designs and techniques of visual art forms like Kaavi Art, students participated in Kala Utsav at National level and got glory in 3dimentional category, students learn to design, sculpt and modelling through 3d Dimensional design skills
- **10. Processes and Strategies:** Art & Architecture view from "An Imperial Capital Vijay Nagara 14th-16th Century" Artistic Architecture Style.
 - Temples: The Vijayanagar Empire built many temples, including stone temples which has inspiration from kadamba dynasty which also has impact from southern part of India including goa.
 - The Vijayanagar Empire's art, architecture, and sculpture can be taught as a subject to explore the culture and history of the empire through 3 Dimensional art skills through art subject
 - Art and architecture from the Vijayanagar Empire can be compared to other art and architecture from the same period or other periods in Indian history.
 - The temple and chariot shows immense figures, artistic excellences and stone carving from Virupaksha temple which is most iconic temples in hampi
 - Gajalaxmi sculpture has importance in vijayanagara empire, it representation of goddess laxmi depicted with four arms seated on a lotus pedestrial and accompanied by two elephants and same idol which was found in goa, sattari village called Karanzol where there was depiction of coconut tree was found on it which was from goa.
 - The temples from kadamba dynasty which was build from raw stones like laterite etc and the same was inspired by Vijaynagar Enpire along the sites of karnataka hampi to goa also, sateri temple is one of greatest and unique example which was found in sattari taluka, village called karanjol in goa where along with the architectural style the surface was decorated with kaavi art on based on mythological themes. In addition the Kaavi is art traditional techniques only used to decorate and demarcate holy or sacred surface of the house, temples or churches. The kaavi art is often accompanied by a story. Its aim is to demarcate the sacred space in a home. Along with this art form the architecture design patterns style from all this temples were thought as 3D Design study in Art subject.
 - The art and architecture of the Vijayanagara Empire influenced Goa's art and architecture through the use of similar design elements and materials. The Vijayanagara Empire ruled Goa for almost a century, and the empire's art and architecture are known for their grandeur and craftsmanship. Numerous exquisite temples were built in Goa under the Vijayanagara Empire, which was recognised for supporting the arts and culture. The temples were constructed at this period with a blend of regional Indian architectural styles and local building methods. The restoration of different temples in Goa such as Saptakoteshwar temple of narvem in Bicholim undertaken by the

directorate of Archaeology has brought to light various unknown facets of architectural heritage that were unknown here before.





Gujarat – Subject Teacher

Name of the subject Teacher: Dr. Ranjanben Laxmishankar Joshi

Subject: Sanskrit

- 1. Area/ Theme: Krudant (participles) teaching with Art
- 2. Curricular Goals: Krudant (participles) learning with Gujarati garba. Students easily learn krudant with art theory.
- **3. Mapping of Competencies:** Memorization of 'Pratyay' (suffix). Students playing garba, writing song and learning Krudant.
- 4. Learning Outcomes: krudant (participles) teaching with Art
- **5.** Use of different components of arts for the comprehension of the concept: Poem writing, Playing Tabla, Singing, Garba
- 6. Resources Used: Narration, Questionairy
- 7. Assessment: Described in file
- 8. Follow-up Activity: Garba with 'Pratyay' (suffix)
- 9. Reflection: Students learned to integrate art and science. Easily memorized participles.
- **10. Processes and Strategies:** observing, questioning, hypothesiz- ing, predicting, planning and investigating, inter- preting, and communi- cating. I tried to include hands-on activities, group work, and interactive discussions. Encourage students to ask questions, express their thoughts, and collaborate with peers.



मूल्यांकन परीक्षा

ગરબાગીત ચાલો કુદંતને ઓળખીએ રે લોલ. કથા કુદંત કેમ બને છે રે લોલ.

મને ત્વા, ત્ય, ય પ્રત્યય લગાડજો રે લોલ. એમ સંબંધક ભૂત કુદંત બને છે રે લોલ. ચાલો કુદંતને ઓળખીએ રે લોલ.

મને તુમ, ઇતુમ પ્રત્યય લગાડજો રે લોલ. એમ ફેત્વર્શ કુદંત બને છે રે લોલ. ચાલો કુદંતને ઓળખીએ રે લોલ.

મને ત:, તા, તમ્ પ્રત્થય લગાડજો રે લોલ. એમ કર્મણિ ભૂતફદંત બને છે રે લોલ. ચાલો ફદંતને ઓળખીએ રે લોલ.

> મને વાન, વતી પ્રત્યય લગાડજો રે લોલ. એમ કર્તરી ભૂત ફુદંત બને છે રે લોલ. ચાલો ફુદંતને ઓળખીએ રે લોલ.

મને તવ્ય, અનીય પ્રત્યય લગાડજો રે લોલ. એમ વિધ્યર્થ કૃદંત બને છે રે લોલ. ચાલો કૃદંતને ઓળખીએ રે લોલ.

1) श्रेष्ठी चन्दनदास: अत्र आनेतव्य:। 2) मया अमात्य राक्षसस्य गृहजन: अन्यत्र प्रेषित:।

2) नया अमात्य राक्षसस्य गृहजन: अन्यत्र प्राप्त: 1 3) त्वं अमात्य राक्षसस्य गृहजनं स्वगृहं अभिनीय रक्षसि।

4) एकदा सिद्धराजः चिन्तितवान्।

5) ते स्वयं क्रियां कर्तुं समर्था: न भवन्ति।

श्याम फलक कार्य

विषयः- संस्कृत विषय वस्तुः- कृदंत कक्षाः- 10 संबंधक भूतकृदंत त्वा, त्य, य हेत्वर्थ कृदंत तुम, इनुम् कर्मणि भूतकृदंत ताः, ता, तम् कर्तरी भूतकृदंत वान, वती विषयर्थ कृदंत

तव्य, अनीय, य



Haryana – Subject Teacher

Name of the subject Teacher: Shailesh Kumar

Subject: Physics

- 1. Area/ Theme: Textured Art
- 2. Curricular Goals: Understand the concept of friction as a resistive force.
 - Demonstrate how friction varies with different surface textures.
 - Apply frictional principles to practical contexts like braking systems and sports surfaces.

3. Mapping of Competencies:

- Conceptual Understanding
- Creative Thinking and Artistic Expression
- Critical Thinking and Real-World Application
- Communication and Collaboration

4. Learning Outcomes:

- Illustrate friction using textured materials and creative art.
- Measure and analyze the force of friction on different surfaces.
- Foster inquiry-based learning and teamwork.
- 5. Use of different components of arts for the comprehension of the concept:
 - Textured Art Creation
 - Tactile Engagement
 - Measurement and Visualization
 - Creative Representation

6. Resources Used:

- Local: Sandpaper, recycled cardboard, cloth, wood.
- Digital: Simulations of friction forces.

7. Assessment:

- 7.1 Observational Assessment
- 7.2 Conceptual Understanding
- 7.3 Practical and Analytical Skills
- 7.4 Critical Thinking and Application
- 7.5 Communication and Presentation
- 8. Follow-up Activity: Design of footwear soles and tires. Identify patterns that optimize friction for different surfaces. They can create their own rubber stamp designs to simulate various textures and measure frictional forces on different materials.

9. Reflection: This project highlights friction concepts through tactile, artistic experiences, enhancing both creativity and analytical thinking. It aligns with NEP 2020's focus on experiential learning.

10. Processes and Strategies:

10.1 Introduction

The project "Exploring Friction Through Textured Sandpaper Art" aims to integrate art and science to help students understand the concept of friction in an engaging and hands-on manner. This classroom practice leverages the tactile properties of sandpaper to create textured art, allowing students to explore the effects of friction in a creative context. Process

- **10.1.1** Introduction to Friction: Begin with a brief explanation of friction, its types, and real-world examples. Use multimedia presentations to illustrate the concept.
- **10.1.2** Materials Needed: Provide students with various grades of sandpaper, art supplies (paints, brushes, markers), and paper.
- **10.1.3** Demonstration: Show how to create textured art using sandpaper. Rub different objects (e.g., pencils, erasers) against sandpaper to produce various textures. Explain how the texture changes with different grades of sandpaper.
- **10.1.4** Hands-On Activity: Students create their textured sandpaper art. Encourage them to experiment with different sandpaper grades and materials to observe the variations in texture and friction.
- **10.1.5** Discussion and Analysis: After the activity, have a group discussion to analyze the results. Ask students to compare the textures and discuss how friction played a role in creating those textures.
- **10.1.6** Documentation: Students document their findings, including sketches and descriptions of their artwork, and reflect on how friction affects everyday life.





Himachal Pradesh – Subject Teacher

Name of the subject Teacher: Poonam Chandel

Subject: English

- 1. Area/ Theme: Pain and inconvenience faced by physically impaired persons
- 2. Curricular Goals: Enhancement in communication skills of students by listening foreign language in real situation. Critical thinking of students is also improved by the method of learning by doing. Environmental issue is touched through the presentation.
- **3. Mapping of Competencies:** The presentation is Motivational, emotional, social and intellectual. It inspires students for critical thinking.
- 4. Learning Outcomes: Behavioural changes among the students are seen. Communication skills of students improved and hesitation of students is eradicated by using this approach of learning by doing.
- **5.** Use of different components of arts for the comprehension of the concept: PLAY (monoact) form of art is used to describe pain of impaired persons. Local craft is also used.
- 6. **Resources Used:** ICT skills are used to give proper background to the act. Mask is made by the students to show burnt face of main Character of the play. Tin leg of Mr. lamb, pahari topi and other local dress material was also arranged by the students.
- 7. Assessment: This method of teaching (learning by doing) is more effective than reading in the class monotonously. Students show more interest in learning.
- **8.** Follow-up Activity: Encouragement of students for listening and speaking this language. A quiz is also conducted and students answered well.
- **9. Reflection:** Students learnt and understand that such method of learning can improve their personality. Improvement in their behaviour and confidence is seen.
- **10. Processes and Strategies:** To perform in NCERT I studied the instructions and guidelines of samridhi and decided to start with a little monoact in local costume. After that a presentation of class students is decided to share with the jury.
 - **10.1** Performance in class:
 - 10.1.1 Selection of Students for the play: To follow this method at first students were selected from the class12th. A script was written by using dialogues from the chapter. Students were inspired to learn those dialogues. They try to speak by following teacher. Slowly and gradually they became perfect in speaking. But they had stage fear and hesitating to act in class. That thing is improved by appreciating their efforts.

10.2 Preparation of Stage: There are lack of facilities in the school as the school lies in remote area. Kyan was installed in different room where we couldn't perform our activity. So that was shifted to the bigger room than the previous one. In the chapter there is description about a wall which Derry climbed. So some students made a wall out of the waste material. Flower pots were also used to decorate the garden of Mr. Lamb.

10.3 Handling of Kyan:

- Few pics were selected to give suitable background to the act.
- The work of changing the background was also given to some students.
- They handled that perfectly on the direction of teacher.
- In this way our performance is completed with cooperation of all students in team.
- At the end experience will be shared with the jury.



Jammu & Kashmir – Subject Teacher

Name of the subject Teacher: Poonam Sharma

Subject: Geography

- 1. Area/ Theme: Volcanoes
- 2. Curricular Goals: To understand the meaning of volcanoes And Parts of volcanoes

3. Mapping of Competencies:

3.1 Knowledge Competencies

3.1.1 Objective:

- Understand the meaning of a volcano and identify its parts.
- Key Concepts:
- Definition of a volcano.
- Types of volcanoes (e.g., active, dormant, extinct).
- Basic parts of a volcano (e.g., magma chamber, vent, crater, lava, ash cloud).
- Teaching Strategies:
- Use visuals like diagrams, videos, or 3D models of volcanoes.
- Provide definitions and examples in simple, relatable language.

3.2 Comprehension Competencies

3.2.1 Objective:

- Explain how the parts of a volcano interact.
- Key Concepts:
- How magma rises from the magma chamber.
- The role of vents in eruptions.
- Formation of lava and ash clouds.
- Teaching Strategies:
- Conduct storytelling to describe the process of a volcanic eruption.
- Create cause-and-effect charts explaining interactions among parts.
- **4. Learning Outcomes:** Students can now understand the meaning of volcanoes and parts of volcanoes.
- **5.** Use of different components of arts for the comprehension of the concept: Visual arts and self composed song
- 6. Resources Used: Charts and model showing magma and lava
- 7. Assessment: A short quiz performing the parts of volcanoes and the difference between magma and lava
- 8. Follow-up Activity: Matching of song with the piano tune by the students.

9. Reflection: Students performed well in the feedback.

10. Processes and Strategies:

WRITE UP

Art-Integrated Teaching of Volcanoes Using Working Models, Piano as a Musical Tool, and a Self-Composed Song

Art integration is a powerful teaching approach that combines creativity with academic learning, making complex topics engaging and memorable. For the topic of volcanoes, integrating working models, music, and self-composed songs ensures a multi-sensory experience, catering to diverse learning styles. Below is a detailed write-up on how I designed and implemented this art-integrated approach to teach volcanoes.

Engaging Students Through a Self-Composed Song

To begin the lesson, I introduced a self-composed song about volcanoes, which served as an auditory hook and set the stage for learning. The song was simple, rhythmic, and packed with scientific facts about volcanoes, including their structure, types, and processes. Here are a few lines:

"Deep in the Earth, where the magma flows, Pressure builds up, and a volcano grows. Crater at the top, magma finds its way, Eruption time—lava on display!"

The melody was played on the piano, enhancing the mood and ensuring that the song resonated with the students. The repetition of key terms like "magma," "lava," and "eruption" helped reinforce the concepts while keeping the session lively. Students were encouraged to sing along, making the learning process interactive and fun.

Building a Working Model of a Volcano

Following the song, I transitioned into a hands-on activity where students created a working model of a volcano. This tactile activity allowed them to visualize and simulate volcanic eruptions.

Materials Used:

- Clay for shaping the volcano
- A plastic bottle for the vent and crater
- Baking soda, vinegar, dish soap, and food coloring for the eruption

Process:

- 1. Students shaped the volcano using clay around the bottle, ensuring they included features like the vent and crater.
- 2. I explained each part of the volcano, linking it to the model as they constructed it.

3. Once the models were ready, I demonstrated how to simulate an eruption using the chemical reaction of baking soda and vinegar. Students observed how "lava" (colored foam) flowed out of the crater, mimicking a real volcanic eruption.

This activity not only solidified their understanding of a volcano's structure but also sparked excitement and curiosity about the natural world.

Integrating Music with the Model

While the eruptions were being conducted, I used the piano to create dramatic sound effects that mimicked the rumbling and explosions of a volcano. Each note sequence corresponded to a stage of the eruption:

- Low bass notes represented magma building pressure.
- Rising scales symbolized the magma moving toward the surface.
- Sharp, loud chords captured the eruption itself.

Students were invited to experiment with the piano, creating their own sounds for volcanic activity. This musical integration deepened their sensory experience, helping them connect emotionally with the topic.



Jharkhand – Subject Teacher

Name of the subject Teacher: Manisha Dhawan

Subject: Chemistry

- 1. Area/ Theme: रसायन शास्त्र
- 2. Curricular Goals: कार्बनिक यौगिको का आणविक संरचना सीखना।
- 3. Mapping of Competencies: कार्बनिक अणु के भीतर परमाणुओं की व्यवस्था को समझने, व्याख्या करने और प्रस्तुत करने की क्षमता, जिसमें कार्यात्मक समूहों की पहचान करना, विभिन्न संरचनात्मक सूत्रों (जैसे रेखा-कोण, संघनित और कंकाल) को पहचानना, वीएसईपीआर सिद्धांत का उपयोग करके आणविक ज्यामिति की भविष्यवाणी करना और संरचनात्मक विशेषताओं को यौगिक के रासायनिक गुणों और प्रतिक्रियाशीलता से संबंधित करना शामिल है।
- 4. Learning Outcomes: बच्चे मिथेन, एथेन, अल्कोहल, प्रोपानोन, एल्डिहाइड के आणविक संरचना को सीखते हैं। सभी यौगिक में उपस्थित परमाणु को पहचानते हैं। किसी यौगिक में उपस्थित परमाणुओं की संख्या जानकर इसकी परमाणुकता जानते हैं। अणु में परमाणुओं के बीच के आबंध को समझते हैं।
- 5. Use of different components of arts for the comprehension of the concept: मूर्ति कला का प्रयोग, द्रव्यमान या आयतन, आकार, मूल्य, रंग, लय या दोहराव, निरंतरता, जोर, संतुलन।
- 6. Resources Used: मिट्टी, बांस की कमाची, एक्रिलिक रंग।
- Assessment: सभी बच्चों को एक-एक यौगिक उदाहरण में देखकर उसकी संरचना मिट्टी और बांस की कमाची से तैयार करने के लिए कहा गया तथा उससे संबंधित प्रश्न पूछ कर उनके सीखने के प्रतिफल की आकलन किया गया।
- 8. Follow-up Activity: मिट्टी और बांस की कमाची सर्व सुलभ संसाधन है। सभी बच्चे इसका प्रयोग कर अपने सभी कार्बनिक यौगिकों की संरचना में गृह कार्य के रूप में करते हैं।
- 9. Reflection: दृश्य कला के अंतर्गत मूर्तिकला का प्रयोग, विज्ञान के कठिन बिंदुओं को सिखाने में बहुत ही सहायक सिद्ध होता है। बच्चे रुचि पूर्वक इसे सीखते हैं और इस सीखने के साथ इसमें विषय का जानकारी के साथ-साथ मूर्ति कला से संबंधित गुण जैसे मिट्टी तैयार करना उसे सही ताप पर सु सूखाना उस पर रंग चढ़ाना इत्यादि कौशल भी सीखते हैं।

10. Processes and Strategies: सर्वप्रथम कक्षा में बच्चों को आईसीटी का प्रयोग कर वर्ग दसवीं के सिलेबस में दिए गए कार्बनिक यौगिक के आणविक संरचना को सिखाया जाता है। सभी विद्यार्थियों को मूर्ति बनाने वाले मिट्टी को गूथना बताया जाता है तथा बांस की कमाची और उस मिट्टी का प्रयोग कर आणविक संरचना बनाना सिखाया जाता है। सभी बच्चों को कुछ समूहों में बांटकर एक-एक यौगिक का आणविक संरचना बनाने को कहा जाता है। सभी बच्चों को कुछ समूहों में बांटकर एक-एक यौगिक का आणविक संरचना बनाने को कहा जाता है। बच्चे समूह के मदद से क्रमशाः मिथेन, प्रोपानोन, क्लोरोएथेन इत्यादि कार्बनिक यौगिक का मॉडल मिट्टी और बांस की कमाची का उपयोग कर तैयार करते हैं। इस दौरान उसके सही संरचना को बनाने के लिए उनके संरचना का एक नमूना दिया जाता है। जिसे देखकर वह उसे संरचना को मूर्त रूप दे मूर्ति कला के इस विधा का प्रयोग कर वह रसायन विज्ञान के कार्बनिक यौगिक की संरचना बनाना सीख वाते हैं। इस प्रक्रिया में आपसी सहयोग से उन्हें इस बात की भी समझ होती है कि प्रत्येक अणु में कौन-कौन से परमाणु है? यह परमाणु आपस में किस प्रकार जुडे होते हैं? किन-किन परमाणुओं के बीच किस प्रकार का आबंध बनता है? उनके बीच आबंध की प्रकृति क्या है? प्रत्येक यौगिक की संरचना बनाने के पश्चात उस परमाणु को संबंधित बताए गए रंग से रंगा जाता है जिसमें कार्बन को काला, हाइड्रोजन को सफेद ऑक्सीजन को लाल और क्लोरीन को पीले रंग से बच्चे रंगते हैं। इस प्रकार मिट्टी की संरचना बनाना तथा उसे सही रंग देना भी सीख पाते हैं। इस प्रक्रिया में बच्चे आसानी से कार्बनिक यौगिक की जिटल संरचना को खेल-खेल में सीखते हैं।



Jharkhand – Art Teacher

Name of the subject Teacher: Sanjay Kumar

Subject: Chemistry

- 1. Area/ Theme: कार्बनिक यौगिको का आणविक संरचना सीखना।
- 2. Curricular Goals: कार्बनिक यौगिको का आणविक संरचना सीखना।
- 3. Mapping of Competencies: कार्बनिक अणु के भीतर परमाणुओं की व्यवस्था को समझने, व्याख्या करने और प्रस्तुत करने की क्षमता, जिसमें कार्यात्मक समूहों की पहचान करना, विभिन्न संरचनात्मक सूत्रों (जैसे रेखा-कोण, संघनित और कंकाल) को पहचानना, वीएसईपीआर सिद्धांत का उपयोग करके आणविक ज्यामिति की भविष्यवाणी करना और संरचनात्मक विशेषताओं को यौगिक के रासायनिक गुणों और प्रतिक्रियाशीलता से संबंधित करना शामिल है।
- 4. Learning Outcomes: बच्चे मिथेन, एथेन, अल्कोहल, प्रोपानोन, एल्डिहाइड के आणविक संरचना को सीखते हैं। सभी यौगिक में उपस्थित परमाणु को पहचानते हैं। किसी यौगिक में उपस्थित परमाणुओं की संख्या जानकर इसकी परमाणुकता जानते हैं। अणु में परमाणुओं के बीच के आबंध को समझते हैं।
- 5. Use of different components of arts for the comprehension of the concept: मूर्ति कला का प्रयोग, द्रव्यमान या आयतन, आकार, मूल्य, रंग, लय या दोहराव, निरंतरता, जोर, संतुलन।
- 6. Resources Used: मिट्टी, बांस की कमाची, एक्रिलिक रंग।
- Assessment: बच्चे जब मिट्टी और बांस की कमाची से आणविक संरचना बनाते हैं। इस संरचना का रंगोली बनाकर अपने समझ को दर्शाते हैं। रोल प्ले के द्वारा कार्बन के सह संयोजक आबंध बनाने की प्रकृति भी समझते हैं।
- 8. Follow-up Activity: बच्चे अपने घर से भी इस तरह के कार्बन कार्बनिक यौगिक की आणविक संरचना बनाकर लाते हैं।
- 9. Reflection: बच्चे कार्बन के सहसंयोजी आबंध बनाने से लेकर यौगिकों के निर्माण को समझ कर कार्बनिक यौगिक की अभिक्रियाओं को आसानी से समझते हैं।
- 10. Processes and Strategies: बच्चों को कार्बन की चतु संयोजी संरचना समझने के पश्चात उसके यौगिकों के निर्माण की विधि को रोल प्ले के द्वारा समझाया जाता है। जिससे वह सहसंयोजी आबंध बनाने

की प्रकृति को समझते हैं। तत्पश्चात मूर्ति कला के गुण का प्रयोग कर उसे आणविक यौगिक के निर्माण को समझते हैं। इस दौरान वह मूर्ति कला से संबंधित कौशल को सीखते हैं जैसे मिट्टी को गूथना उसे चिकना करना, उसे सही अनुपात में बांटना, उस पर सही रंग चढाना इत्यादि। आणविक संरचना का रंगोली बनाकर उसकी द्विविमीय आकृति द्वारा दर्शाते हैं। रोल प्ले की मदद से कार्बन के गुणों को समझते हैं और कार्बन के सहसंयोजी प्रकृति को जानकर नैतिक गुण का भी उत्थान होता है।

मूर्ति कला सीखाते हुए उन्हें मूर्ति कारों के प्रति लगाव उत्पन्न होता है। इस तरह से वे कला के साथ विज्ञान सीखने का एक अनुभव प्रदान होता है जो उनके लिए रोचक और कभी ना भूल पाने वाली सीख हो जाती है।



Maharashtra – Subject Teacher

Name of the subject Teacher: Savita Bharat Laveri

Subject: Hindi

- 1. Area/ Theme: Viram chinha
- 2. Curricular Goals: भावों की अभिव्यक्ति स्पष्ट करने के लिए और आकलन सहित सुपाठ्य, शुद्ध लेखन करना। संवेदनाओं की अभिव्यक्ति करना। किसी विचार, भाव का सुसंबंध प्रभावी लेखन करना।
- 3. Mapping of Competencies: छात्र वार्तालाप करते समय या लेखन करते समय भावों को अभिव्यक्त करने हेतु उचित विराम चिन्हों का प्रयोग करें। उचित आरोह एवं अवरोह का उपयोग करने का प्रयास करते हैं।
- 4. Learning Outcomes: विराम चिन्हों के सही उपयोग की अच्छी समझ रखने के साथ-साथ छात्रों के लिए यह भी महत्वपूर्ण है कि उनके सही और गलत उपयोग के कारण लेखन पर पढ़ने वाले प्रभाव के बारे में जागरूकता विकसित करें।
- 5. Use of different components of arts for the comprehension of the concept: चित्रकला के माध्यम से उचित विराम चिन्हों का रेखांकन करना एवं गीत, गायन, अभिनय, मुद्रा द्वारा और शब्दों की तुकबंदी के आधार पर विराम चिन्हों के प्रकारों का दृढीकरण करना।
- 6. Resources Used: विराम चिन्ह के चित्र एवं कला के माध्यम से चित्रकारी करना गीत, अभिनय के माध्यम से उचित स्थान पर विराम चिन्ह लगाना।
- 7. Assessment: छात्र वाक्य रचना में उचित विराम चिन्हों का प्रयोग करने का प्रयास करते हैं। विराम चिन्हों के प्रयोग से वाक्य में गति एवं ठहराव आता है, जो वाक्य में कही गई बातों को अधिक स्पष्ट करता है।
- 8. Follow-up Activity: छात्रों को उचित आरोह, अवरोहों के साथ विराम चिन्हों का परिचय कराना, गीत के माध्यम से उचित विराम चिन्हों को सही स्थान पर लगाना, चित्रकारी के माध्यम से अपनी भावों की अभिव्यक्ति को व्यक्त कराना।
- 9. Reflection: किसी भी लेखन को अर्थपूर्ण बनाने और व्याकरणिक रूप से सही होने के लिए विराम चिन्ह आवश्यक है। भाषा में लेखन की शुद्धता के लिए विराम चिन्ह बहुत महत्व रखते हैं। इसे वक्ता या लेखक के लिए अपनी भावनाओं, विचारों को स्पष्ट करना आसान हो जाता है।
- 10. Processes and Strategies: सुगमकर्ता छात्रों को विराम चिन्ह एवं उनकी परिभाषाओं से अवगत कराते हैं। कक्षा नौवीं के छात्र अब तक 10 प्रकार के विराम चिन्हों को जानते एवं पहचानते हैं। सुगमकर्ता विराम चिन्हों

के चित्र दर्शाते हुए छात्रों से उनके नाम एवं उनका प्रयोग पूछते हैं। छात्र उन चित्रों को देखकर विराम चिन्हों के नाम पूछते है और उनका वाक्य में उपयोग कराते है। सुगमकर्ता विराम चिन्ह एवं उनके नाम की जोडियाँ चयन करने का प्रयास करते हैं। सुगमकर्ता छात्रों से उचित विराम चिन्हों का प्रयोग करते हुए वाक्य रचना करवाते हैं। छात्र वाक्य रचना में उचित विराम चिन्हों का प्रयोग करने का प्रयास करते हैं। विराम चिन्हों के माध्यम से छात्र उन्हें सहजता से समझने योग्य बनाता है। संक्षिप्त में विराम चिन्हों का प्रयोग करने से वाक्य को तोड़ा जाता है और विचारों को संरचित किया जाता है। संक्षिप्त में विराम चिन्हों का प्रयोग करने से वाक्य को तोड़ा जाता है और विचारों को संरचित किया जाता है। विराम चिन्हों से पाठक को पता चलता है कि कब धीमा करना है, कब तेज करना है और कब रुकना है। सरल शब्दों में विराम चिन्ह ऐसे चिह्न या प्रतीक होते हैं जो वाक्य के भीतर अर्थ बनाते हैं और उनका समर्थन करते हैं, वह वाक्य को तोड़ने में भी मदद करते हैं और जोड़ने में भी मदद करते हैं। विभिन्न विराम चिन्हों के उदाहरणों में पूर्णविराम, अल्पविराम, प्रश्नवाचक चिन्ह, अर्धविराम, इकहरा उद्धरण चिन्ह, दोहरा उद्धरण चिन्ह, योजक चिन्ह, विवरण चिन्ह आदि विराम चिन्ह शामिल है। कला के माध्यम से उपरोक्त पाठ्यंश का दृढीकरण और अधिक अच्छी तरह से हो सकता है। छात्र विभिन्न चित्रकारी अभिनय, गीत गायन इनका उपयोग करके कला के माध्यम से उपरोक्त पाठ्यंश का दृढीकरण और अधिक अच्छी तरह से हो सकता है। छात्र विभिन्न चित्रकारी अभिनय, गीत गायन इनका उपयोग करके विरामचिन्हों का पुनरावर्तन करके उन्हे अच्छी तरीके से स्मरण रखने का और लेखन कौशल्य में उनका उचित प्रयोग करके शुद्धलेखन, हस्ताक्षर साफ एवं दुरुस्त शैली में लिखने का प्रयास करते है।



Maharashtra - Art Teacher

Name of the subject Teacher: Arti Yashwant Thoke

Subject: Art and Music

- 1. Area/ Theme: Viram chinha
- 2. Curricular Goals: भावों की अभिव्यक्ति स्पष्ट करने के लिए और आकलन सहित सुपाठ्य, शुद्ध लेखन करना। संवेदनाओं की अभिव्यक्ति करना। किसी विचार, भाव का सुसंबंध प्रभावी लेखन करना।
- 3. Mapping of Competencies: छात्र वार्तालाप करते समय या लेखन करते समय भावों को अभिव्यक्त करने हेतु उचित विराम चिन्हों का प्रयोग करें। उचित आरोह एवं अवरोह का उपयोग करने का प्रयास करते हैं।
- 4. Learning Outcomes: विराम चिन्हों के सही उपयोग की अच्छी समझ रखने के साथ-साथ छात्रों के लिए यह भी महत्वपूर्ण है कि उनके सही और गलत उपयोग के कारण लेखन पर पढ़ने वाले प्रभाव के बारे में जागरूकता विकसित करें।
- 5. Use of different components of arts for the comprehension of the concept: चित्रकला के माध्यम से उचित विराम चिन्हों का रेखांकन करना एवं गीत, गायन, अभिनय, मुद्रा द्वारा और शब्दों की तुकबंदी के आधार पर विराम चिन्हों के प्रकारों का दृढीकरण करना।
- 6. Resources Used: विराम चिन्ह के चित्र एवं कला के माध्यम से चित्रकारी करना गीत, अभिनय के माध्यम से उचित स्थान पर विराम चिन्ह लगाना।
- 7. Assessment: छात्र वाक्य रचना में उचित विराम चिन्हों का प्रयोग करने का प्रयास करते हैं। विराम चिन्हों के प्रयोग से वाक्य में गति एवं ठहराव आता है, जो वाक्य में कही गई बातों को अधिक स्पष्ट करता है।
- 8. Follow-up Activity: छात्रों को उचित आरोह, अवरोहों के साथ विराम चिन्हों का परिचय कराना गीत के माध्यम से उचित विराम चिन्हों को सही स्थान पर लगाना, चित्रकारी के माध्यम से अपनी भावों की अभिव्यक्ति को व्यक्त कराना।
- 9. Reflection: किसी भी लेखन को अर्थपूर्ण बनाने और व्याकरणिक रूप से सही होने के लिए विराम चिन्ह आवश्यक है। भाषा में लेखन की शुद्धता के लिए विराम चिन्ह बहुत महत्व रखते हैं। इसे वक्ता या लेखक के लिए अपनी भावनाओं, विचारों को स्पष्ट करना आसान हो जाता है।
- 10. Processes and Strategies: सुगमकर्ता छात्रों को विराम चिन्ह एवं उनकी परिभाषाओं से अवगत कराते हैं। कक्षा नौवीं के छात्र अब तक 10 प्रकार के विराम चिन्हों को जानते एवं पहचानते हैं। सुगमकर्ता विराम चिन्हों

के चित्र दर्शाते हुए छात्रों से उनके नाम एवं उनका प्रयोग पूछते हैं। छात्र उन चित्रों को देखकर विराम चिन्हों के नाम पूछते है और उनका वाक्य में उपयोग कराते है। सुगमकर्ता विराम चिन्ह एवं उनके नाम की जोडियाँ चयन करने का प्रयास करते हैं। सुगमकर्ता छात्रों से उचित विराम चिन्हों का प्रयोग करते हुए वाक्य रचना करवाते हैं। छात्र वाक्य रचना में उचित विराम चिन्हों का प्रयोग करने का प्रयास करते हैं। विराम चिन्हों के माध्यम से छात्र उन्हें सहजता से समझने योग्य बनाता है। संक्षिप्त में विराम चिन्हों का प्रयोग करने से वाक्य को तोड़ा जाता है और विचारों को संरचित किया जाता है। संक्षिप्त में विराम चिन्हों का प्रयोग करने से वाक्य को तोड़ा जाता है और विचारों को संरचित किया जाता है। विराम चिन्हों से पाठक को पता चलता है कि कब धीमा करना है, कब तेज करना है और कब रुकना है। सरल शब्दों में विराम चिन्ह ऐसे चिह्न या प्रतीक होते हैं जो वाक्य के भीतर अर्थ बनाते हैं और उनका समर्थन करते हैं, वह वाक्य को तोड़ने में भी मदद करते हैं और जोड़ने में भी मदद करते हैं। विभिन्न विराम चिन्हों के उदाहरणों में पूर्णविराम, अल्पविराम, प्रश्नवाचक चिन्ह, अर्धविराम, इकहरा उद्धरण चिन्ह, दोहरा उद्धरण चिन्ह, योजक चिन्ह, विवरण चिन्ह आदि विराम चिन्ह शामिल है। कला के माध्यम से उपरोक्त पाठ्यंश का दृढीकरण और अधिक अच्छी तरह से हो सकता है। छात्र विभिन्न चित्रकारी, अभिनय, गीत गायन इनका उपयोग करके कला के माध्यम से उपरोक्त पाठ्यंश का दृढीकरण और अधिक अच्छी तरह से हो सकता है। छात्र विभिन्न चित्रकारी अभिनय, गीत गायन इनका उपयोग करके विरामचिन्हों का पुनरावर्तन करके उन्हे अच्छी तरीके से स्मरण रखने का और लेखन कौशल्य में उनका उचित प्रयोग करके शुद्धलेखन, हस्ताक्षर साफ एवं दुरुस्त शैली में लिखने का प्रयास करते है।





Mizoram – Subject & Art Teacher

Name of the subject Teacher: Rebek Lalruatfeli & CS Lalrinpuii

Subject: Social Science

- 1. Area/ Theme: Poverty as a Challenge
- 2. Curricular Goals: Understand the concept of poverty, indicators and issues
- 3. Mapping of Competencies: Identify, explore, analyse, evaluate knowledge

4. Learning Outcomes:

- 4.1 Students understand the meaning of poverty.
- 4.2 Students know the indicators of poverty.
- **4.3** Students know the issues related to poverty.
- 5. Use of different components of arts for the comprehension of the concept: The teacher used Rice, water and money for explaining the basic needs. Drama was conducted. Chart was used for explaining the indicators of poverty.
- 6. Resources Used: Rice, water, money and chart

7. Assessment:

- 7.1 What is the meaning of poverty?
- 7.2 What are the issues related to rural and urban poverty?
- 7.3 What are the different indicators of poverty? Give examples.
- 8. Follow-up Activity: Group Discussion, Quiz & Test
- **9. Reflection:** Teaching "Poverty as a Challenge" has been a thought-provoking experience. Through this theme, I aimed to sensitize my students to the harsh realities of poverty and encourage them to think critically about its causes and consequences.

10. Processes and Strategies:

10.1 Processes:

- **10.1.1** Selection of Teaching Methods: As students have different learning styles, the teacher selected different teaching methods.
- **10.1.2** Implementation of the Lesson: The teacher delivers the lesson, by using a variety of teaching methods and instructional materials.
- **10.1.3** Assessment and Evaluation: The teacher assess the students' learning and evaluate the effectiveness of the lesson.

10.2 Strategies:

10.2.1 Art forms: Students play drama related to poverty.

10.2.2 Group Discussions: The teacher divides the students into groups for group discussion.



Nagaland – Subject Teacher

Name of the subject Teacher: Keneile-ü Suokhrie

Subject: Zoology and Environmental studies.

- 1. Area/ Theme: Awareness topic on HIV/AIDS.
- 2. Curricular Goals: To help learners understand how HIV/ AIDS virus enter human body and attacks immune system.
- **3. Mapping of Competencies:** To let students learn by immersive learning through role play in form of drama where each gets role assigned to play and are clubbed as per their ability and teacher acts as facilitator ensuring holistic approach to micro learning.
- 4. Learning Outcomes: Students learn about the power of student ownership and being engaged in learner centric approach enables them to enjoy learning process in joyful manner.
- 5. Use of different components of arts for the comprehension of the concept: Using drama where role play by students are done and personifying the biological or scientific terms where students become the technical terms and talk like they are human DNA or Aids virus etc giving lively play on otherwise challenging topic.
- 6. Resources Used: Cost effective/low cost teaching material like old unused cardboard boxes, chart papers, ribbons, crowns and swords made from chart papers and cardboard boxes, scissors, glues, pencils, colours-water colours, crayons, Sketch pens, erasers etc.
- 7. Assessment: Their assessments are carried out from their concept clarity which is shown during dramas and how they define the terms and the roles of the immune cells and human DNA and viral RNA definition and role plays.
- 8. Follow-up Activity: Group discussion to further peer to peer learning is encouraged by dividing them into groups, healthy competition between participants where each quiz the other team members and the one who struggle to get it clearly is mentored by winning team mates.
- **9. Reflection:** Brainstorming on joyful learning method and healthy networking by arranging online webinars with experts using digital tools and scientists helps the learning to focus on resource person centric methods instead of monotony of teacher centric approach.
- **10. Processes and Strategies:** To let students get confidence to venture into unchartered territory of learning through art as a platform to showcase their skills and let the ones weak in academics also feel included in the learning process, every learner is given equal opportunity and ensuring healthy social emotional environment Ice- breaking activities are

done before hand to help them feel comfortable working with opposite gender and collaboration is encouraged. Breaking teacher centric approach where students own up their learning makes them valued and encourage critical thinking and exposure to experts from outside the state through virtual platforms under my supervision boosts their morale and also enables them to discuss solutions and ideas with peers subject teacher as well as professional from other institutions as well.



Odisha – Subject Teacher

Name of the subject Teacher: Manisa Mishra

Subject: Science

- 1. Area/ Theme: Control and Coordination.
- **2.** Curricular Goals: To know the structure and function of brain properly encouraging scientific temper skills ideas among students.
- **3. Mapping of Competencies:** Cognitive, emotional, social, motor, problem solving, encouraging creativity ideas.

4. Learning Outcomes:

- **4.1** Students will analyse and understand the topic properly.
- **4.2** Student will create visual representation to study structure and function of human brain.
- **4.3** Student will develop brain storming activity individually.
- **4.4** Encouraging peer learning.
- **5.** Use of different components of arts for the comprehension of the concept: Diagram and models, handout on fun facts about the brain, online resources ppt, videos.
- 6. Resources Used: Wool, cardboard, glue, scissor, drawing board, A4 papers, colour papers.

7. Assessment:

- 7.1 Observation of student's participation.
- 7.2 Encouraging peer participation.
- 7.3 Quality of painting to assess aesthetic aspects.
- 7.4 Focus on capturing names and to study properly.
- 8. Follow-up Activity: Self-assessment to know different activities of brain.
- 9. Reflection: To think about responses.
- **10. Processes and Strategies:** My process of teaching is based on 5E approach child is a natural learner as dynamic organism and paradigm of education has been shifted from child to learner as the topic is a tough topic started with some examples theme of my topic is control and coordination with curricular goals. structure and function of human brain this approach of pedagogy enhancement encourage results of mental construction learning outcomes to know the structure and function of brain using cardboard, glue, wool, scissor, human brain projects, song for the comprehension of the concept. curriculum study with mix up art and culture promotes collaborative active learning in which students work

together to solve the problem and investigate new concepts by asking questions observing and analyzing, drawing conclusions.



Rajasthan – Subject Teacher

Name of the subject Teacher: Amit Kumar Sharma

Subject: Science

- 1. Area/ Theme: विद्यार्थियों के लिए आनंदपूर्ण अधिगम का विकास (अंधविश्वास से विश्वास तक)।
- 2. Curricular Goals: विज्ञान के आधारभूत प्रयोगों के माध्यम से आनंदपूर्ण अधिगम एवं चेतना का विकास।
- 3. Mapping of Competencies: दृश्य कलाओं एवं करके सीखने की कला का विकास।
- 4. Learning Outcomes: विद्यार्थियों वैज्ञानिक दृष्टिकोण का विकास एवं अंधविश्वास का उन्मूलन साथ ही सामाजिक चेतना।
- 5. Use of different components of arts for the comprehension of the concept: सामान्य परिवेश में जादू विज्ञान एवं कला के सामंजस्य से प्रकट किए गए, नाट्य विधा का उपयोग किया गया।
- 6. Resources Used: दृश्य सामग्री, पोस्टर, रासायनिक प्रयोग इत्यादि।
- 7. Assessment: वैज्ञानिक दृष्टिकोण का विकास करने हेतु विज्ञान प्रयोग एवं नाट्य कला उपयोग कर रोमांच के साथ अधिगम साथ ही विद्यार्थियों की सहभागिता सुनिश्चित।
- 8. Follow-up Activity:
 - आओ करके सीखे।
 - विज्ञान अंधविश्वास से विश्वास की ओर।
- 9. Reflection: विद्यार्थियों में मनोरंजक तरीके से विज्ञान के प्रयोगों को समझा और सहज अधिगम प्राप्त किया, सामाजिक चेतना का विकास एवं विज्ञान के प्रति लगाव में वृद्धि।
- 10. Processes and Strategies: विद्यार्थियों के लिए आनंदपूर्ण अधिगम का विकास करने हेतु नाट्य कला का उपयोग कर विज्ञान की कठिन अवधारणाओं को सरल तरीके से आओ करके सीखे अर्थात विद्यार्थियों को शामिल करते हुए सामाजिक चेतना अंधविश्वास से विश्वास की ओर ले जाने हेतु आठ अलग अलग विज्ञान आधारित प्रयोग करके दिखाए गए सर्वप्रथम बच्चों में जिज्ञासा का विकास कर शाब्दिक तरीके से लक्ष्य को समझाया तदोपरांत विद्यार्थियों को शामिल करते हुए पहले नाट्य विधा से जादू कर दिखाया और फिर उसके पीछे का विज्ञान समझाया। अंत में विश्वास के साथ विज्ञान विषय एवं विषयवस्तु की ओर आकर्षित किया।



Sikkim – Subject Teacher

Name of the subject Teacher: Heman Kumar Chettri

Subject: English

- 1. Area/ Theme: Letter Writing.
- 2. Curricular Goals: Use language for effective communication through writings various forms (letter writing, essay etc.) Use language to develop reasoning and argumentation skills. Develop 21st century skills.
- **3. Mapping of Competencies:** Use language appropriate to social context, expresses agreement or disagreement with reasons, writes in different styles (Narratives, descriptive, expository, persuasive). Writes for real life situations and for school.

4. Learning Outcomes:

- **4.1** Learner will be able to differentiate the formal and informal letter.
- 4.2 Learner will be able to know the format of the formal and informal letter.
- 4.3 Learner will be able to write a letter (formal and informal) in R1.
- 4.4 Learner will develop inter-personal and social skills.

5. Use of different components of arts for the comprehension of the concept:

- **5.1 Skit:** Learner will be given 15 minutes for skit presentation which they will prepare by themselves and showcase in the class on the various given topics.
- 5.2 Hopscotch: Integration with nature and physical aspect.

6. Resources Used:

- Learner themselves.
- White Board.
- Smart Board.
- School Play-ground.
- Classroom wall.
- Textbook etc.

7. Assessment:

- Learner will be provided with a set of questions on letter writing.
- Formative assessment will be undertaken to assess the improvements in letter writing.
- 8. Follow-up Activity: Chart preparations, Power Point Presentation, Singing etc.

9. Reflection:

9.1 Panchaadi: It will be assessed.

- **10. Processes and Strategies:** Learner will be given the different topic on which they will perform the skit. Topics like excessive use of mobiles, health, global warming will be provided. learners will perform the skit. Facilitator will provide the handout on the format and different letters. Different games will also be provided to the students. Formative assessments will also be done vigorously.
- 11. Photographs: No Photographs

Uttar Pradesh – Subject Teacher

Name of the subject Teacher: Babita Mehrotra

Subject: Science

- 1. Area/ Theme: Chemistry.... world of indicator.
- 2. Curricular Goals: To give the knowledge of indicators via puppet and song.
- 3. Mapping of Competencies: Understand the topic by song pictures and puppet.
- **4. Learning Outcomes:** To get the knowledge of indicator natural indicator artificial indicator acid and base.
- 5. Use of different components of arts for the comprehension of the concept: Different expects of arts like doll puppet are used.
- 6. Resources Used: Puppet and magic doll and others things etc.
- 7. Assessment: Achievement of learning outcome.
- 8. Follow-up Activity: Via song.
- 9. Reflection: Student gets the knowledge of topic.
- 10. Processes and Strategies: Indicator is a word which revolves around our world. From our kitchen to laboratory these are present. Under the program of Samriddhi, the topic of indicator is narrated by medium of Puppet and song. This song is created by me for students. Thus students are capable to understand so typical science subject incorporate with art. All the student take part in this type of activity and after this activity each and every student can inculcate tradition Civilization science arts etc. I have also created a magic doll which is actually a doll of indicators. Is magic doll having turmeric hibiscus lychain etc. indicators which comes in contact with acid or base this magic doll turns change in colour. Thus with the help of Puppet by singing a self-narrated song we can propagate the material for the students.



Uttar Pradesh – Art Teacher

Name of the subject Teacher: Dr. Manju Devi

Subject: Art

- 1. Area/ Theme: Drawing
- 2. Curricular Goals: कला को विज्ञान के साथ जोड़ते हुए पाठ्य उद्देश्य को प्राप्त करना।
- 3. Mapping of Competencies: चित्रों में रंग आकर्षक व कठपुतली के माध्यम से विषय वस्तु को जानना।
- 4. Learning Outcomes: कला को विज्ञान से जोड़ना।
- 5. Use of different components of arts for the comprehension of the concept: कला के विभिन्न घटकों का उपयोग किया गया है।
- 6. Resources Used: कठपुतली जादू की गुड़िया।
- 7. Assessment: सीखने के प्रतिफल की प्राप्ति।
- 8. Follow-up Activity: चटख व आकर्षक रंगों द्वारा कठपुतली का निर्माण।
- 9. Reflection: बच्चों को पाठ्यवस्तु की पूर्ण जानकारी।
- 10. Processes and Strategies: सूचक एक ऐसा शब्द है जिसके चारों ओर हमारी रंग बिरंगी दुनिया है हमारी किचन से लेकर प्रयोगशाला तक यह फैला हुआ है समृद्धि कार्यक्रम के अंतर्गत इस विषय वस्तु को कठपुतली व गीत के माध्यम से विद्यार्थियों को समझने का प्रयास किया गया है यह गीत विज्ञान अध्यापिका बबीता मेहरोत्रा द्वारा रचित किया गया है इसके द्वारा विद्यार्थी विज्ञान जैसे जटिल विषय की विषय वस्तु को भी सरलता से समक्ष जाते हैं इस प्रकार की गतिविधियां विज्ञान में करने से बच्चे अपनी सभ्यता और संस्कृति से जुड़े रहते हैं।



Kendriya Vidyalaya Sangathan - Subject Teacher

Name of the subject Teacher: Jyothi V N

Subject: English

- **1.** Area/ Theme: "The Adventure", a Science Fiction narrative, is a thought-provoking interplay of fiction and reality exploring the unpredictability of history leading to an alternate socio-political landscape and the quantum theory of parallel worlds-suggesting the existence of multiple coexisting realities.
- **2.** Curricular goals: Analyze complex narratives, explore alternate history and multiverse theory, encourage critical thinking, and integrate ICT and art education.
- **3. Mapping of competencies:** Conceptual and analytical skills, critical thinking, problemsolving, creativity, innovation, digital literacy, communication, collaboration, cultural awareness, ethical values.
- **4. Learning outcomes:** Enhances comprehension, creativity, digital literacy, collaboration, analytical skills, cultural awareness, eco-consciousness, emotional expression, physical coordination, and heritage preservation.
- 5. Use of different components of arts for the comprehension of the concept: Illustration, 3D virtual tours, shadow puppetry, and podcasts blend storytelling, creativity, cultural exploration, and scientific insights into learning.
- 6. **Resources used:** Projector and screen, white cloth and lamps Card boards, Chart papers, markers, Sticks, craft materials. Textbook, Reference books and online research tools.
- **7. Assessment:** Evaluation rubrics include creativity, originality, understanding, art/ICT integration, curricular relevance, collaboration, participation, and presentation skills.
- **8.** Follow-up Activity: Classroom discussion, Quiz, Q&A Session Journal entry Reflection on the whole process. How did sketching the settings help visualise the world of the story? Did the use of Google Earth inspire a deeper connection to the text?
- **9. Reflection:** Art integrated learning fostered holistic learning through sketching, Google Earth, puppetry, and podcasts, enhancing comprehension, creativity, connections, and deeper engagement.

10. Processes and strategies:

- **10.1 Preparatory Activities:** Reading of the full version of the story, as the textbook prescribes only an excerpt from the original text. Vocabulary activity to drive home the expressions phrases as used in the context.
- **10.2 Classroom Transactions:** Introduce the author and familiarise the students with the works and achievements Brainstorming on features of literary genres Science Fiction and Alternate History Group formation to assign the following activities.
 - **10.2.1** Sketch as You Read: The Rail Route from Pune to Bombay Students will sketch a rail map illustrating the rail route from Pune to Bombay and the major stations and landmarks as narrated by Prof. Gaitonde.
 - **10.2.2** Google Earth Project: Exploring Prof. Gaitonde's Journey Students will use Google Earth Tool and prepare a video to trace the places mentioned in the story. A virtual tour will be presented to the class with the narration in the background.
 - **10.2.3** Shadow Puppetry: Depicting the Third Battle of Panipat Puppets are prepared with cardboards and chart papers representing key characters like Sadashiv Rao Bhau, Ahmad Shah Abdali, armed soldiers, forts and new era landscapes. A script is prepared with narrations and directions for visuals and background of each scene. Voice over with background score is recorded and edited.
 - **10.2.4** Podcast: A Conversation with Prof. Gaitonde and Rajendra Deshpande Students script and record a podcast simulating a conversation of the hosts with Prof. Gaitonde and Rajendra Deshpande.

10.3 Curricular Integration:

- **10.3.1** History: Understanding alternate narratives of historical events.
- **10.3.2** Geography: Mapping and interpreting locations within the story.
- **10.3.3** Science: Exploring the multiverse theory and its implications.
- **10.3.4** Art and Technology: Using creative mediums and digital tools for expression.
- **10.4 Expected Outcomes:** Enhanced comprehension of The Adventure and its interdisciplinary themes. Improved visualization, creativity, and digital literacy. Development of collaboration and analytical skills. A deeper appreciation of literature's connection with other fields.
- **10.5** Assessment Criteria: Each activity will be assessed based on: Relevance to the text and curricular objectives. Creativity and originality. Depth of analysis and reflection. Engagement and teamwork in group activities.

11. Photographs:



Kendriya Vidyalaya Sangathan - Art Teacher

Name of the subject Teacher: T R Rajesh

Subject: Art

- **1.** Area/ Theme: Exploring alternate realities through 'The Adventure' narrative, integrating art, science fiction, and language for a multidisciplinary experience.
- **2.** Curricular Goals: Analyze complex narratives, explore alternate history, and multiverse theory, integrating ICT and art education for critical thinking.
- **3. Mapping of Competencies:** Conceptual and analytical skills, critical thinking, problemsolving, creativity, innovation, digital literacy, communication, collaboration, cultural awareness, ethical values.
- 4. Learning Outcomes: Gains knowledge of traditional art, preserves heritage, channels emotions, refines coordination, and promotes eco-consciousness and sustainability.
- 5. Use of different components of arts for the comprehension of the concept: Illustration, 3D virtual tours, shadow puppetry, and podcasts blend storytelling, creativity, cultural exploration, and scientific insights into learning.

6. Resources Used:

- Projector and screen, white cloth and lamps.
- Card boards, Chart papers, markers, Sticks, craft materials.
- Textbook, Reference books and online research tools.
- **7. Assessment:** Evaluation rubrics include creativity, originality, understanding, Art/ICT integration, curricular relevance, collaboration, participation, and presentation skills.
- **8.** Follow-up Activity: Art critique, peer feedback, reflection journals, illustration workshops, shadow puppetry, and comic book creation.
- **9. Reflection:** AIL fostered creativity, visual literacy, and critical thinking, as illustration and shadow puppetry brought narrative to life.
- **10. Processes and strategies:** To facilitate a deep understanding of the science fiction narrative, a multi-faceted approach was employed. Preparatory activities commenced with brainstorming sessions on literary genres, followed by reading and analyzing the full version of the story.

To contextualize the narrative, students were introduced to the author's works and achievements. Pre-reading activities delved into scientific principles, including catastrophe theory and quantum theory, to provide a foundation for understanding the story's themes.

Vocabulary activities and group formations enabled students to engage with the narrative through various mediums. Four primary activities were assigned: Sketch as You Read, Google Earth Project, Shadow Puppetry, and Podcast.

Each activity employed distinct strategies to promote critical thinking, creativity, and collaboration. Sketching facilitated visualization, while Google Earth enabled students to explore geographical settings. Shadow puppetry brought historical events to life, and podcasting encouraged critical reflections and imaginative expansions.

Throughout these processes, students navigated complex concepts, developed their critical thinking skills, and cultivated creativity. By integrating art, science, and language, this project fostered a rich and immersive learning experience.







Jawahar Navodaya Vidyalaya Samiti - Subject Teacher

Name of the subject Teacher: Aditi Mahajan

Subject: Mathematics

1. Area/ Theme: Congruence of triangles integrated with Warli art of Maharashtra.

2. Curricular Goals:

- To understand the concept of congruence and its applications.
- To develop critical thinking and creativity through artistic expressions.
- To equip students with mathematical skills to navigate everyday life and further education.

3. Mapping of Competencies:

- Expressing mathematical ideas and concepts through artistic expression.
- To show how mathematical concepts build upon each other illustrating progression from basic to complex skills.

4. Learning Outcomes:

- Students will be able to understand the concept of congruence of triangles.
- Students will be able to identify congruent triangles.
- Students will be able to apply the concept to daily life problems and situations.

5. Use of different components of arts for the comprehension of the concept:

- Exploring the concept and making relationship with other art forms.
- Designing and creating something new.

6. Resources Used:

- Art supplies such as colour papers, brushes oil paints, poster colours.
- Use of ICT.
- Handmade TLM's.
- Use of Pot and plates of clay.

7. Assessment:

- Asking questions orally during the teaching learning process.
- Engaging students in group activities.
- Quality of artistic expressions.

8. Follow-up Activity:

- Arranging an exhibition of the artwork done by the students.
- Appreciating and rewarding the best artwork.

• Taking feedback from the students about their artwork.

9. Reflection:

- How did the mathematical concept integrate with the art form?
- Gathering feedback from students.
- What modifications do you want in future activities?

10. Processes and Strategies:

Write up for Art Integrated Pedagogy PM SHRI JAWAHAR NAVODAYA VIDYALAYA, KURUKSHETRA

10.1 Subject- Mathematics

10.2 Concept/theme: Congruence of triangles integrated with Warli art of Maharashtra.

10.3 Curricular goals:

- To understand the concept of congruence and its applications.
- To develop critical thinking and creativity through artistic expressions.
- To equip students with mathematical skills to navigate everyday life and further education.
- To develop students' ability to apply mathematical concepts in real life situations.

10.4 Mapping of competencies

- Creativity- expressing mathematical ideas and concepts through artistic expression.
- Progression of skills- to show how mathematical concepts build upon each other illustrating progression from basic to complex skills.

10.5 Learning outcomes-

- Students will be able to understand the concept of congruence of triangles.
- Students will be able to identify congruent triangles.
- Students will be able to apply the concept to daily life problems and situations.

10.6 Use of different components of art process:

- **Exploration:** exploring the concept and making relationship with other art forms.
- Creativity: designing and creating something new.

10.7 Strategies

- Visual art such as painting on walls, plate painting, pot painting etc.
- Singing rhymes and relating the topic to make the learning joyful.
- Performing activity in small groups.
- Using examples from routine or in and around to make the topic interesting.

10.8 Resources:

• Art supplies such as colour papers, brushes oil paints, poster colours.

- Use of ICT.
- Handmade TLM's.
- Use of Pot and plates of clay.

10.9 Assessment

- Asking questions orally during the teaching learning process.
- Engaging students in group activities.
- Quality of artistic expressions.
- Accuracy and completeness of the task assigned.

10.10 Follow up activity:

- Arranging an exhibition of the artwork done by the students.
- Appreciating and rewarding the best artwork.
- Taking feedback from the students about their artwork.

10.11 Reflection:

- How did the mathematical concept integrate with the art form?
- Gathering feedback from students.
- What modifications do you want in future activities?





Daman and Diu + Dadra and Nagar Haveli – Subject Teacher

Name of the subject Teacher: Kishor Pandharinath Dange

Subject: English

- 1. Area/ Theme: The Road Not Taken by Robert Frost Choices and Consequences
- **2.** Curricular Goals: Enhance literary analysis through art integration, develop critical thinking, and promote interdisciplinary learning.
- **3.** Mapping of Competencies: Understanding poetic devices, interpreting themes, analyzing symbolism, and connecting literature to real-life situations.

4. Learning Outcomes:

- Interpret and analyze poetic themes.
- Relate literary concepts to life decisions.
- Express understanding through visual storytelling.
- 5. Use of different components of arts for the comprehension of the concept:
 - Warli painting to depict diverging roads and choices.
 - Symbolic representation of consequences through Warli figures.
 - Storytelling through visual elements.
- 6. Resources Used: The Road Not Taken text, Warli art references, chart paper, acrylic paints, brushes, projectors.

7. Assessment: Described in file

- Student presentations explaining their Warli depiction of the poem.
- Group discussions on how art enhances comprehension.
- Rubrics assessing creativity, analysis, and articulation.
- 8. Follow-up Activity: Garba with 'Pratyay' (suffix)
 - Students create individual Warli sketches representing their own life choices.
 - Written reflection on how visual art deepens literary understanding.
- 9. Reflection: Students learned to integrate art and science. Easily memorized participles.
 - Art integration made poetry more engaging.
 - Students gained a deeper appreciation of artistic and literary connections.
 - Encouraged creative expression and interdisciplinary learning.
 - Art Teacher (Visual Arts).

10. Processes and Strategies:

Introduction: This project integrates the poem The Road Not Taken by Robert Frost with the indigenous Warli painting style to enhance literary understanding through visual storytelling. The aim is to engage students in a creative, interdisciplinary learning experience where they explore poetic themes using traditional Indian art.

10.1. Lesson Plan:

10.1.1 Introduction to the Poem:

- Read and analyze The Road Not Taken in class.
- Discuss the central theme of choices and their consequences.
- Encourage students to share personal experiences where they faced difficult choices.

10.1.2 Introduction to Warli Art:

- Provide a brief history of Warli painting, its significance, and traditional elements.
- Show examples of how Warli paintings depict daily life, nature, and movement.
- Explain how symbols are used to represent emotions and ideas.

10.1.3 Integration of Warli Art with the Poem:

- Divide students into groups and assign roles (sketching, painting, designing symbols).
- One group creates a background depicting a forest with two diverging paths.
- Another group illustrates the traveler, using Warli figures to represent different choices.
- A third group adds elements to show the consequences of each road (crowded vs. isolated, familiar vs. adventurous).
- Students collaboratively complete the artwork, ensuring coherence between the poem and the painting.
- Each student contributes their own unique artistic representation of choices.

10.1.4 Presentation & Reflection:

- Each group presents their interpretation of the poem through their artwork.
- Students explain how Warli symbols convey the poem's message.
- A discussion follows on how art and literature intersect to deepen understanding.
- Students reflect on their own choices and how they define their life path.

11. Photographs: No Photo

Daman and Diu + Dadra and Nagar Haveli – Art Teacher

Name of the subject Teacher: Dharmesh Dalvi

Subject: Drawing

- 1. Area/ Theme: Representation of Life's Choices
- 2. Curricular Goals: Introduce students to traditional Warli art, develop fine motor skills, and encourage storytelling through painting.
- **3. Mapping of Competencies:** Understanding Warli techniques, visual storytelling, use of symbols, and artistic composition.
- 4. Learning Outcomes:
 - Apply Warli techniques to depict literary themes.
 - Use symbols to convey abstract ideas.
 - Collaborate to create meaningful artwork.
- 5. Use of different components of arts for the comprehension of the concept:
 - Warli figures representing the traveler and different paths.
 - Contrast in road depictions using traditional motifs.
 - Integration of nature and cultural elements in storytelling.
- 6. Resources Used: Warli art guides, natural color pigments, brushes, handmade paper, projectors for demonstrations.

7. Assessment:

- Evaluation of artistic accuracy and creativity.
- Clarity in storytelling through Warli figures.
- Student explanations of their artistic choices.

8. Follow-up Activity:

- Exhibit student artwork in a school gallery.
- Encourage further exploration of folk art in literature.

9. Reflection:

- Warli painting enhanced the understanding of poetic themes.
- Fostered respect for indigenous art forms.
- Strengthened collaborative learning and artistic expression.

10. Processes and Strategies:

Introduction: This project integrates the poem The Road Not Taken by Robert Frost with the indigenous Warli painting style to enhance literary understanding through visual storytelling. The aim is to engage students in a creative, interdisciplinary learning experience where they explore poetic themes using traditional Indian art.

10.1. Lesson Plan:

10.1.1 Introduction to the Poem:

- Read and analyze The Road Not Taken in class.
- Discuss the central theme of choices and their consequences.
- Encourage students to share personal experiences where they faced difficult choices.

10.1.2 Introduction to Warli Art:

- Provide a brief history of Warli painting, its significance, and traditional elements.
- Show examples of how Warli paintings depict daily life, nature, and movement.
- Explain how symbols are used to represent emotions and ideas.

10.1.3 Integration of Warli Art with the Poem:

- Divide students into groups and assign roles (sketching, painting, designing symbols).
- One group creates a background depicting a forest with two diverging paths.
- Another group illustrates the traveler, using Warli figures to represent different choices.
- A third group adds elements to show the consequences of each road (crowded vs. isolated, familiar vs. adventurous).
- Students collaboratively complete the artwork, ensuring coherence between the poem and the painting.
- Each student contributes their own unique artistic representation of choices.

10.1.4 Presentation & Reflection:

- Each group presents their interpretation of the poem through their artwork.
- Students explain how Warli symbols convey the poem's message.
- A discussion follows on how art and literature intersect to deepen understanding.
- Students reflect on their own choices and how they define their life path.





राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद् NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING